

## **BODY STROKING APPARATUS**

### RELATED U.S. APPLICATIONS

Not applicable.

### STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

Not applicable.

### REFERENCE TO MICROFICHE APPENDIX

Not applicable.

### FIELD OF THE INVENTION

[0001] The present invention relates to stress reduction apparatus. More particularly, the present invention relates to devices for the touching and massaging of a human body. Additionally, the present invention relates to devices for providing a very light touching sensation against the human body.

### BACKGROUND OF THE INVENTION

[0002] Massage devices are well known for tactile stimulation and for muscle relaxation. These massage devices are intended for applying a substantial pressure onto the bone or muscle structure of the human body. Often, the pressure is coupled with a vibratory sensation so as to further "loosen" the muscles and to provide for pleasing relaxation. However, under certain circumstances, persons do not desire to have the strong pressure applied by such massage devices. Often, persons desire to attain a tactile sensation which is much lighter and much softer for the stimulation of the

human body and for stress reduction purposes.

**[0003]** In the past, it has been known to use feathers for caressing or tickling the body. However, other individuals are required so as to move these feathers in a desired position over the body. The use of such feathers and/or tickling devices have not generally been known to be accompanied with a mechanical method for moving these devices over the human body.

**[0004]** It is believed that the use of such very light tactile sensations achieves a great stress reduction effect. The longer that the light tactile sensations are applied to the human body, the greater the stress reduction.

**[0005]** In the past, various U.S. patents have issued relating to such massaging and tactile sensation devices. For example, U.S. Patent No. 6,074,353, issued on June 13, 2000 to Y. Helmer, describes a device for caressing the body. This device has strips of flexible soft material hanging from a horizontal support above the body. A motive source is used to move the horizontal support over the body so that the strips can contact the body with varying degrees of tactile sensitivity to caress, tickle, scratch, numb and create arousal sensations. The device is provided with an arm which is rotated in a circular pattern so that periodically, the strips of flexible material will contact the human body. The strips of flexible material do not travel a longitudinal path along the human body.

**[0006]** U.S. Patent No. 5,916,182, issued on June 29, 1999 to W. F. O. Fengler, describes a massaging apparatus stored under a bed which is movable to position over the bed. The massaging apparatus includes a mounting arm which can be moved from the space under the bed and pivoted to an upright position. When in the upright position, an elongated arm is connected to the mounting arm and pivotable in a direction toward and away from the bed. The elongated arm includes a massaging device mounted on its outer end. The massaging device is capable of being separately

driven in a reciprocating manner. The elongated arm is appropriately counterbalanced so that the massaging device will apply a slight downward pressure onto the person who is being massaged.

[0007] It is an object of the present invention to provide a body stroking apparatus which achieves a stress reduction in the human body.

[0008] It is another object of the present invention to provide a body stroking apparatus which applies a very light tactile sensation to the human body.

[0009] It is a further object of the present invention to provide a body stroking apparatus which applies such a light tactile sensation along the length of the human body.

[0010] It is a further object of the present invention to provide a body stroking apparatus which allows the tactile sensation to move back and forth continually across the human body.

[0011] It is a further object of the present invention to provide a body stroking apparatus which can be easily used by a single individual.

[0012] It is a further object of the present invention to provide a body stroking apparatus which is easy to use, relatively inexpensive, and easy to manufacture.

[0013] These and other objects and advantages of the present invention will become apparent from a reading of the attached specification and appended claims.

#### BRIEF SUMMARY OF THE INVENTION

[0014] The present invention is a body stroking apparatus comprising a housing having a channel extending longitudinally therealong, an arm extending outwardly from the housing through the channel and vertically upwardly therefrom, a crossbar extending outwardly transversely to the arm, a plurality of flexible members affixed to the crossbar and extending downwardly therefrom, and a

translation means for moving the arm back and forth along the channel.

[0015] In one embodiment of the present invention, the arm comprises a L-shaped member having a lower portion extending outwardly through the channel. The arm also can include a receptacle formed at the top of the L-shaped member and a rod detachably received in the top of the L-shaped member and extending vertically upwardly therefrom. The crossbar is attached to this rod.

[0016] In one embodiment of the present invention, the crossbar includes a clamp which is secured to this rod. The clamp serves to adjust a height of the crossbar along the rod.

[0017] The crossbar has a hook-and-loop material affixed to an exterior surface thereof. The plurality of flexible members have a surface with a strip of complementary hook-and-loop material secured to the hook-and-loop material of the crossbar. The plurality of flexible members can include a plurality of flexible strips extending downwardly from the crossbar, a plurality of beaded lines extending downwardly from the crossbar or a plurality of flexible strands extending downwardly from the crossbar. This plurality of flexible members extends downwardly from the crossbar for a distance less than the vertical length of the arm.

[0018] A mat with a surface suitable for receiving a human body thereon can be positioned adjacent to a side of the housing. The crossbar will extend over a top of the mat.

#### BRIEF DESCRIPTION OF THE VIEW OF THE DRAWING

[0019] FIGURE 1 is an interior perspective view of the body stroking apparatus of the present invention.

[0020] FIGURE 2 is an end view showing the operation of the body stroking apparatus of the present invention.

[0021] FIGURE 3 is a detailed view showing the surface of the crossbar associated with the present invention.

[0022] FIGURE 4 is a side view of the flexible material strips as used on the crossbar of the present invention.

[0023] FIGURE 5 is a side elevational view of an alternative embodiment of the flexible members as used in the present invention.

#### DETAILED DESCRIPTION OF THE INVENTION

[0024] Referring to FIGURE 1, there is shown the body stroking apparatus 10 in accordance with the preferred embodiment of the present invention. The body stroking apparatus 10 includes a housing 12 having a channel 14 extending longitudinally therealong. An arm 16 extends outwardly from the housing 12 through the channel 14 and vertically upwardly therefrom. A crossbar 18 is affixed to the arm 16 and extends transversely outwardly therefrom. A plurality of flexible members 20 are affixed to the crossbar 18 and extend downwardly therefrom. The housing 12 is provided with a suitable translation mechanism for moving the arm 16 back and forth along the channel 14.

[0025] In FIGURE 1, it can be seen that the housing 12 has a generally elongated square tubical configuration with a flat bottom surface 22. The flat bottom surface 22 allows the housing 12 to easily rest on any flat surface in a stable manner. An electrical cord 24 will extend outwardly from the housing 12 so as to supply electrical energy to the translation mechanism on the interior of the housing 12. A suitable speed control 26 and a timer 28 can be provided on the top surface 30 of the housing 12. The speed control 26 can be used to control the rate at which the translation mechanism

moves the arm 16 back and forth through the channel 14. The timer 28 can be used to set the amount of time in which the device is being used.

[0026] The channel 14 is a slot which is provided on the side 32 of the housing 12. The channel 14 will generally face the user. The crossbar 18 extends outwardly of the arm 16 on the side of the housing 12 with the channel 14 formed thereon. The arm 16 will move back and forth in the channel 14 in the manner illustrated by arrow 34.

[0027] Various mechanisms can be used for the translation mechanism which is included in the interior of the housing 12. For example, in one form of the present invention, the translation mechanism can be a cable mounted over a pair of sheaves in the interior of the housing 12. The sheaves can be rotated so as to move the cable back and forth. A suitable car-type mechanism can be joined to the inner end of the arm 16 so as to move the arm 16 back and forth. When the arm 16 contacts certain limits which is within the interior of the housing, the motor will reverse directions of the cable movement of the cable. Alternatively, a worm gear can be provided on the interior of the housing 12. The worm gear can be rotated in one direction so as to cause the arm 16 to move rearwardly and rotated in the other direction so as to cause the arm to move forwardly. The motor connected to the worm gear can be reversed so as to drive the arm 16 in its desired back and forth directions. Suitable limit switches can be provided so as to limit the travel of the arm 16 within the housing 12. It is believed that, within the concept of the present invention, various other types of translation mechanisms can be utilized which are known in the art.

[0028] The arm 16 includes an L-shaped member 36 which has a lower portion extending outwardly through the channel 14. A receptacle 38 is formed at the top of the L-shaped member 36. A rod 40 can be detachably received in the top of the L-shaped member 36 so as to extend upwardly

therefrom. The crossbar 18 will be affixed to this rod 40. A suitable locking mechanism 42 can be provided so that the rod 40 can telescope. As can be seen in FIGURE 1, the crossbar 18 is clamped to the upper portion 44 of the rod 40. The rotation of the knob 42 will lock the telescoping rod 40 into its desired position and desired vertical height.

[0029] The crossbar 18 includes a clamp 46 which is secured to the upper portion 44 of rod 40. The clamp allows for an adjustment of the crossbar with respect to the rod 40.

[0030] As can be seen in FIGURE 1, the plurality of flexible members 20 extend downwardly from the crossbar 18 for a length less than the vertical height of the rod 40. In FIGURE 1, the plurality of flexible members includes a plurality of flexible strands 48. However, as will be described hereinafter, various other flexible members can be secured to the crossbar 18 so as to achieve a desired effect.

[0031] FIGURE 2 shows the operation of the apparatus 10 of the present invention. As can be seen in FIGURE 2, the housing 12 has the L-shaped member 36 extending outwardly therefrom. The rod 40 is received within the receptacle formed at the top of the L-shaped member 36. Knob 42 is used so as to control the height of the telescoping upper portion 44 associated with rod 40. The crossbar 18 is secured by clamp 46 to the upper portion 44 of rod 40. The plurality of flexible members 20 extend downwardly from the crossbar 18. In the embodiment shown in FIGURE 2, the plurality of flexible members 20 include a plurality of flexible strips extending downwardly in general parallel relationship to each other.

[0032] In FIGURE 2, it can be seen that a mat 50 is positioned on the same flat surface that the flat bottom surface 22 of housing 12 is placed. The side 32 of the housing 12 is placed adjacent to the side 52 of the mat 50. In this arrangement, the person 54 is in a suitable position for receiving the

effect of the body stroking apparatus 10. The person 54 is shown as laying on the top surface of the mat 50 adjacent to the side 32 of the housing 12.

[0033] The arm 16 will translate back and forth in the channel 14 so that the plurality of flexible strips 60 will gently glide over the back of the human being 54 in a soft caressing manner. As such, the present invention will provide a very soft tactile sensation to the human being 54. This will create a significant stress reduction in the human body.

[0034] FIGURE 3 shows a detailed view of the crossbar 18. In FIGURE 3, the crossbar 18 has a hook-and-loop material 62 affixed thereto and extending therealong. As such, the hook-and-loop material 62 will provide a suitable area whereby various types of flexible members can be secured to the crossbar 18. For example, in FIGURE 4, a plurality of flexible strips 60 (such as that illustrated in FIGURE 2) are illustrated. A band 70, at the top of the flexible strips 60, will allow the strips 60 to hang downwardly therefrom in generally parallel relationship to each other. The band 70 has several hook-and-loop material patches 72 secured thereto. These hook-and-loop material patches 72 are complementary to the hook-and-loop material strips 62 shown in FIGURE 3. As such, the plurality of flexible strips 60 can be properly secured to the crossbar 80 by conventionally pressing the patches 72 onto the strips 62.

[0035] FIGURE 5 shows an alternative embodiment of the plurality of flexible members 20. In FIGURE 5, it can be seen that a band 80 has several beaded lines 82 extending downwardly therefrom. Band 80 can have a similar configuration, with suitable hook-and-loop material patches, such as that shown in FIGURE 4. The beaded lines 82 will extend downwardly for a suitable length for rubbing over the human body. The beaded lines 82 will provide a different tactile sensation than that of the flexible strands of FIGURE 1 or of the flexible strips of FIGURES 2 and 4.



[0036] The foregoing disclosure and description of the invention is illustrative and explanatory thereof. Various changes in the details of the illustrated construction can be made within the scope of the appended claims without departing from the true spirit of the invention. The present invention should only be limited by the following claims and their legal equivalents.